Aspen Acres PWS # 7220005 SOURCE WATER ASSESSMENT REPORT

January 25, 2001



State of Idaho Department of Environmental Quality

Disclaimer: This publication has been developed as part of an informational service for the source water assessments of public water systems in Idaho and is based on data available at the time and the professional judgement of the staff. Although reasonable efforts have been made to present accurate information, no guarantees, including expressed or implied warranties of any kind, are made with respect to this publication by the State of Idaho or any of its agencies, employees, or agents, who also assume no legal responsibility for the accuracy of presentations, comments, or other information in this publication. The assessment is subject to modification if new data is produced.

Under the Federal Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency (EPA) to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the Act. The Idaho Department of Environmental Quality is completing the assessments for all Idaho public drinking water systems. The assessment for your particular drinking water source is based on a land use inventory within a 1,000 foot radius of your drinking water source, sensitivity factors associated with the source and characteristics associated with either your aquifer or watershed in which you live.

This report, *Source Water Assessment for Public Water System #* 7220005 describes the public drinking water system, the associated potential contaminant sources located within a 1,000` boundary around the drinking water source, and the susceptibility (risk) that may be associated with any associated potential contaminants. This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this system. **The results should <u>not be</u> used as an absolute measure of risk and is not intended to undermine the confidence in your water system.**

The Aspen Acres drinking water system consists of four wells located outside the one hundredyear flood plain, which is rated moderately to highly susceptible to potential contaminants. The final high rating falls in the SOC, IOC, and microbial category scores, while the final moderate rating falls in the VOC category score. This is due to several factors within your surrounding area that could be potential contaminant sources to your drinking water systems. The following considerations have been applied in determining your final well ratings: hydrologic characteristics, physical integrity of the wells, land use characteristics, and potentially significant contaminant sources. There are no potential contaminant sources identified within the delineated capture zones at this time, although the type of land-use surrounding your well should be noted in evaluating your well susceptibility to potential contaminants. The Natural Resources Conservation Service (NRCS) has determined that Fremont County is a high farm-chemical use area; therefore nitrate is a potential contaminant within your surrounding County. Potential water contaminants include: petroleum type products (VOC), septage (IOC) and household hazardous (SOC) waste from recreational vehicles in relation to the RV Park. Fertilizers (IOC) and pesticides (SOC) in relation to the golf course, and microbial (protozoa, bacteria) potential contaminants in relationship to the your wells' close proximity to surface water. These are only possible contaminant sources and are presently not a threat to your drinking water system. If you have any additional information regarding your drinking water system, please contact the Idaho Falls Regional Office. A copy of the susceptibility analysis for your system along with a map showing any potential contaminant sources is included with this summary. Information regarding the potential contaminants within the 1,000' boundary have been summarized and included in Table 1 of page three.

Table 1.

SITE#	Source Description	Source of Information	Potential Contaminants
	No Potential Contaminant Identified	Database Search	None

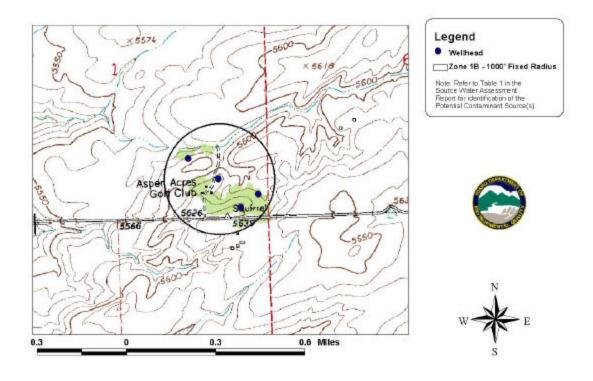
IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

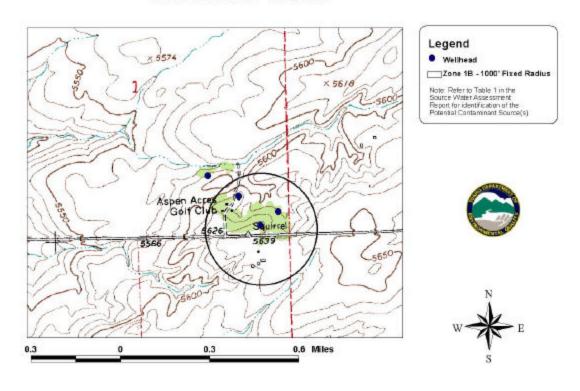
For the Aspen Acres source water protection activities should focus on implementation of practices aimed at protecting the wells from surrounding inorganic, organic and microbial related contaminants that may leach within the designated source water area. You may want to establish a dialog with the following state and local agencies related to possible leachable contaminants that may affect the wells. Source water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term.

For assistance in developing source water protection strategies please contact Carlin Feisthamel or Rochelle Mason at the Idaho Falls Regional (IDEQ) Office at (208) 528-2650.

Aspen Acres: Well House # 1 PWS Number: 7220005



Aspen Acres: #4 Well Hill Top PWS Number: 7220005



POTENTIAL CONTAMINANT INVENTORY LIST OF ACRONYMS AND DEFINITIONS

<u>AST (Aboveground Storage Tanks)</u> – Sites with above ground storage tanks.

<u>Business Mailing List</u> – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

<u>CERCLIS</u> – This includes sites considered for listing under the <u>Comprehensive Environmental Response Compensation</u> and <u>Liability Act (CERCLA)</u>. CERCLA, more commonly known as <u>ASuperfund@</u> is designed to clean up hazardous waste sites that are on the national priority list (NPL).

<u>Cyanide Site</u> – DEQ permitted and known historical sites/facilities using cyanide.

<u>Dairy</u> – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

<u>Deep Injection Well</u> – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (IDEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100year floodplains.

<u>Group 1 Sites</u> – These are sites that show elevated levels of contaminants and are not within the priority one areas.

<u>Inorganic Priority Area</u> – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

<u>Landfill</u> – Areas of open and closed municipal and non-municipal landfills.

<u>LUST (Leaking Underground Storage Tank)</u> – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

<u>Mines and Quarries</u> – Mines and quarries permitted through the Idaho Department of Lands.)

<u>Nitrate Priority Area</u> – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

NPDES (National Pollutant Discharge Elimination System) – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

<u>Organic Priority Areas</u> – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

Recharge Point – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RICRIS – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list

<u>UST (Underground Storage Tank)</u> – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

<u>Wastewater Land Applications Sites</u> – These are areas where the land application of municipal or industrial wastewater is permitted by IDEQ.

<u>Wellheads</u> – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.

Public Water System Name :

ASPEN ACRES

Public Water System Number 7220005 1/8/2001 3:58:38 PM

Well# : #1 WELL HOUSE

Definition	System Construction		SCORE			
Sanitary Survey (if yee, indicate date of last survey)						
Samitary Survey (if yes, indicate state of last survey)						
Mell meets 10NM construction standards	Driller Log Available	NO				
Weilhead and number seel accented to low percented lity unit		YES				
Casing and annular seal extend to low permeability unit Highest production 10 force below static water level NO 1		NO				
#### Highest production 100 feet below static water level		YES	-			
Moderate Moderate						
Hydrologic Sensitivity						
Soils are poorly to moderately drained	Well located outside the 100 year flood plain	NO	1			
Soils are poorly to moderately drained		Total System Construction Score	5			
Vadose zone composed of gravel, fractured rook or unknown YES 1						
Depth to first water > 300 feet	Soils are poorly to moderately drained					
Aquitard present with > 50 feet cumulative thickness NO 2 Total Hydrologic Score 6		YES				
Total Hydrologic Score 6 Fotential Contaminant / Land Use - ZONE IA RENGATED CROPLAND 2 2 2 2 2 2 2 2 2						
TOC NOC SOC Micro Score Sc	Aquitard present with > 50 feet cumulative thickness	NO	2			
Potential Contaminant / Land Use - ZONE 1A		Total Hydrologic Score	6			
Land Use Zone 1A IRRIGATED CROPLAND 2 2 2 2 2 2 2 2 2			IOC	VOC	SOC	Microbia
Farm chemical use high YES 2	Potential Contaminant / Land Use - ZONE 1A		Score	Score	Score	Score
IOC, VOC, SOC, or Microbial sources in Zone IA	Land Use Zone 1A	IRRIGATED CROPLAND	2	2	2	2
Total Potential Contaminant Source/Land Use Score - Zone 1A 4 2 4 2 2 4 2 2 Potential Contaminant / Land Use - ZONE 1B Contaminant sources present (Number of Sources) NO 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Farm chemical use high	YES	2	0	2	
Potential Contaminant / Land Use - ZONE 1B	IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Contaminant sources present (Number of Sources)	Total Potent	ial Contaminant Source/Land Use Score - Zone 1A	4	2	4	2
Contaminant sources present (Number of Sources)						
Sources of Class II or III leacheable contaminants or APO		NO	0	0	0	0
A Points Maximum	(Score = # Sources X 2) 8 Points Maximum		0	0	0	0
Zone 1B contains or intercepts a Group 1 Area YES 2 0 0 0 0 0	Sources of Class II or III leacheable contaminants or	NO	0	0	0	
Land use Zone 1B Greater Than 50% Irrigated Agricultural Land 4 4 4 4 4 4 4 4 4	4 Points Maximum		0	0	0	
Total Potential Contaminant Source / Land Use Score - Zone 1B 6 4 4 4 Potential Contaminant / Land Use - ZONE II Contaminant Sources Present NO 0 0 0 0 Sources of Class II or III leacheable contaminants or NO 0 0 0 0 Land Use Zone II 0 0 0 0 0 Potential Contaminant Source / Land Use Score - Zone II 0 0 0 0 0 Potential Contaminant / Land Use - ZONE III Contaminant Source Present NO 0 0 0 0 Sources of Class II or III leacheable contaminants or NO 0 0 0 0 Is there irrigated agricultural lands that occupy > 50% of NO 0 0 0 0 Total Potential Contaminant Source / Land Use Score - Zone III 0 0 0 0 0	Zone 1B contains or intercepts a Group 1 Area	YES	2	0	0	0
Potential Contaminant / Land Use - ZONE II		Greater Than 50% Irrigated Agricultural Land	4	4	4	4
Contaminant / Land Use - ZONE II			6	4	4	4
Sources of Class II or III leacheable contaminants or NO						
Land Use Zone II	Contaminant Sources Present	NO	0	0	0	
Potential Contaminant Source / Land Use Score - Zone II	Sources of Class II or III leacheable contaminants or	NO	0	0	0	
Potential Contaminant / Land Use - ZONE III Contaminant Source Present NO 0 0 0 0 Sources of Class II or III leacheable contaminants or NO 0 0 0 0 Is there irrigated agricultural lands that occupy > 50% of NO 0 0 0 0 Total Potential Contaminant Source / Land Use Score - Zone III 0 0 0 0	Land Use Zone II		0	0	0	
Contaminant Source Present NO 0 0 0 0 Sources of Class II or III leacheable contaminants or NO 0 0 0 0 Is there irrigated agricultural lands that occupy > 50% of NO 0 0 0 0 0 Total Potential Contaminant Source / Land Use Score - Zone III 0 0 0 0 0	Potential	Contaminant Source / Land Use Score - Zone II	0	0	0	0
Sources of Class II or III leacheable contaminants or NO 0 0 0 0 Is there irrigated agricultural lands that occupy > 50% of NO 0 0 0 Total Potential Contaminant Source / Land Use Score - Zone III 0 0 0 0 0	Potential Contaminant / Land Use - ZONE III					
Is there irrigated agricultural lands that occupy > 50% of NO 0 0 0 Total Potential Contaminant Source / Land Use Score - Zone III 0 0 0 0 0	Contaminant Source Present	NO	0	0	0	
Total Potential Contaminant Source / Land Use Score - Zone III 0 0 0 0 0	Sources of Class II or III leacheable contaminants or	NO	0	0	0	
	Is there irrigated agricultural lands that occupy > 50% of	NO	0	0	0	
			0	0	0	0
Cumulative Polential Contaminant / Land Use Score 10 6 8 6	Cumulative Potential Contaminant / Land Use Score		10	 6	8	 6

Public Water System Name :

ASPEN ACRES Well# : #2 WELL RV PARK Public Water System Number 7220005 1/8/2001 4:04:32 PM 1. System Construction Drill Date Driller Log Available Sanitary Survey (if yes, indicate date of last survey) 1997 YES Well meets IDWR construction standards 1 Wellhead and surface seal maintained Casing and annular seal extend to low permeability unit Highest production 100 feet below static water level Well located outside the 100 year flood plain 1 Total System Construction Score 2. Hydrologic Sensitivity ______ Soils are poorly to moderately drained Vadose zone composed of gravel, fractured rock or unknown YES 1 Depth to first water > 300 feet NO 1 Aguitard present with > 50 feet cumulative thickness NO Total Hydrologic Score SOC Microbial 3. Potential Contaminant / Land Use - ZONE 1A Score Score Score Score ______ Land Use Zone 1A IRRIGATED CROPLAND 0 Farm chemical use high YES 2 NO NO IOC, VOC, SOC, or Microbial sources in Zone 1A NO Total Potential Contaminant Source/Land Use Score - Zone 1A 4 2 Potential Contaminant / Land Use - ZONE 1B Contaminant sources present (Number of Sources) 0 (Score = # Sources X 2) 8 Points Maximum 0 0 0 0 Sources of Class II or III leacheable contaminants or Ω Ω 4 Points Maximum 0 YES 2 Ω Zone 1B contains or intercepts a Group 1 Area Ω Land use Zone 1B Greater Than 50% Irrigated Agricultural 4 Total Potential Contaminant Source / Land Use Score - Zone 1B 4 Potential Contaminant / Land Use - ZONE II Contaminant Sources Present Ω Ω Sources of Class II or III leacheable contaminants or 0 0 Ω Land Use Zone II Potential Contaminant Source / Land Use Score - Zone II ______ Potential Contaminant / Land Use - ZONE III Contaminant Source Present Ω 0 NO Sources of Class II or III leacheable contaminants or 0 0 0 NO 0 Is there irrigated agricultural lands that occupy > 50% of 0 Total Potential Contaminant Source / Land Use Score - Zone TTT Cumulative Potential Contaminant / Land Use Score 10 6 6

4. Final Susceptibility Source Score	13	12	13	13
5. Final Well Ranking	High	Moderate		High

ASPEN ACRES

1/8/2001 4:13:22 PM Public Water System Number 7220005

Well# : #3 WELL GOLF

System Construction		SCORE			
Drill Date					
Driller Log Available	NO				
Sanitary Survey (if yes, indicate date of last survey)	YES	1997			
Well meets IDWR construction standards	NO NO	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	NO NO	2			
Highest production 100 feet below static water level Well located outside the 100 year flood plain	NO NO	1 1			
	Total System Construction Score	5			
Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
	Total Hydrologic Score	6			
		IOC	VOC	SOC	Microbial
. Potential Contaminant / Land Use - ZONE 1A		Score	Score	Score	Score
Land Use Zone 1A	IRRIGATED PASTURE	1	1	1	1
Farm chemical use high	YES	2	0	2	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Total Potent	ial Contaminant Source/Land Use Score - Zone 1A	4	2	4	2
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	NO	0	0	0	0
(Score = # Sources X 2) 8 Points Maximum		0	0	0	0
Sources of Class II or III leacheable contaminants or	NO	0	0	0	
4 Points Maximum		0	0	0	
Zone 1B contains or intercepts a Group 1 Area	YES	2	0	0	0
Land use Zone 1B	Greater Than 50% Irrigated Agricultural Land	4	4	4	4
Total Potentia	l Contaminant Source / Land Use Score - Zone 1B	6	4	4	4
Potential Contaminant / Land Use - ZONE II					
Contaminant Sources Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or	NO	0	0	0	
Land Use Zone II		0	0	0	
Potential	Contaminant Source / Land Use Score - Zone II	0	0	0	0
Potential Contaminant / Land Use - ZONE III					
Contaminant Source Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or	NO	0	0	0	
Is there irrigated agricultural lands that occupy > 50% of	NO	0	0	0	
Total Potential	Contaminant Source / Land Use Score - Zone III	0	0	0	0
Cumulative Potential Contaminant / Land Use Score		9	5	8	5

4. Final Susceptibility Source Score	13	12	13	13
5. Final Well Ranking	High	Moderate	Moderate	High

Public Water System Name :

ASPEN ACRES

Public Water System Number 7220005 2/6/2001 4:55:50 PM

Well# : #4 WELL HILLTOP

System Construction		SCORE			
Drill Date					
Driller Log Available	NO				
Sanitary Survey (if yes, indicate date of last survey)	YES	1997			
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	NO	1			
Well located outside the 100 year flood plain	NO	1			
	Total System Construction Score	5			
Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
	Total Hydrologic Score	6			
		IOC	VOC	SOC	Microbial
. Potential Contaminant / Land Use - ZONE 1A		Score	Score	Score	Score
Land Use Zone 1A	IRRIGATED CROPLAND	2	2	2	2
Farm chemical use high	YES	2	0	2	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Total Potent	ial Contaminant Source/Land Use Score - Zone 1A	4	2	4	2
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	NO	0	0	0	0
(Score = # Sources X 2) 8 Points Maximum		0	0	0	0
Sources of Class II or III leacheable contaminants or	NO	0	0	0	
4 Points Maximum		0	0	0	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B	Greater Than 50% Irrigated Agricultural Land	4	4	4	4
	l Contaminant Source / Land Use Score - Zone 1B	4	4	4	4
Potential Contaminant / Land Use - ZONE II					
Contaminant Sources Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or	NO	0	0	0	
Land Use Zone II		0	0	0	
Potential	Contaminant Source / Land Use Score - Zone II	0	0	0	0
Potential Contaminant / Land Use - ZONE III					
Contaminant Source Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or	NO	0	0	0	
Is there irrigated agricultural lands that occupy > 50% of	NO	0	0	0	
Total Potential	Contaminant Source / Land Use Score - Zone III	0	0	0	0

4. Final Susceptibility Source Score	13	12	13	13
5. Final Well Ranking	High	Moderate	 High	High